

Listing of claims (replacing all prior versions):

1. (currently amended) A machine-base method comprising:

in connection with a project,

selecting a first subset of historical data about a system being modeled for use in generating a tentative predictive model for the system, the first subset of historical data comprising less than all of based on the historical data about a system being modeled;

selecting a ~~model development~~ process for developing a predictive model for the system from among multiple possible model development processes;

applying the selected model development process ~~on~~ to the first subset of historical data to generate a the tentative predictive model;

~~validating the selected model development process based on selecting~~ a second subset of the historical data, the second subset being less than all of the historical data and being at least a portion of a complementary dataset of the first subset or being randomly selected from the historical data and independent of the first subset;

applying the tentative predictive model to the selected second subset,

determining whether results of applying the tentative predictive model to the selected second subset validate that the selected model development process will produce a final predictive model that is accurate for data that is not part of the historical data, and

if the selected model development process is so validated, then applying the validated model development process to a full set of historical data that includes the first and second subsets to generate a final predictive model, and

using the final predictive model.

2. (previously presented) The method of claim 1 also including displaying on a user interface project goals to enable the user to assess performance of the project, wherein the project goals comprise at least one of: cumulative lift over an interval of interest, degree of monotonicity, or concordance scores.

3. (previously presented) The method of claim 2 also including

identifying that the tentative predictive model does not produce at least a predefined degree of lift for at least one of the subsets.

4. (previously presented) The method of claim 3 also including enabling a user to choose interactively at least one model development criterion change or transformation or interaction of variables to improve a fit of the predictive model.

5 (previously presented) The method of claim 4 also including graphically displaying and comparing measures of performance for a validation dataset and a training dataset.

6. (currently amended) A machine-based method comprising:  
in connection with a project,

selecting a model development process from multiple model development processes to apply on a first subset of less than all of a set of historical data to generate a first tentative predictive model,

applying the selected model development process including (a) automatic automatically transforming transformations of variables of the subset of the historical data, automatic generation of automatically generating the first tentative predictive model, and automatic generation of (c) automatically generating performance measures of the first tentative predictive model,

determining a validity of validating the selected development process based on the performance measures of the first predictive model; and

applying the validated model development process to a full set of historical data to generate a second, final model, and  
using the final predictive model.

7. (previously presented) The method of claim 6 also including generating measures of the performance of the predictive model for the at least two datasets, the performance measures being generated separately percentile by percentile.

8. (previously presented) The method of claim 6 also including graphically displaying and comparing measures of the performance for at least two datasets.

9. (previously presented) The method of claim 6 also including

persistently storing the validated model development process and a validated model for computing propensities for at least one target outcome variable, the propensities serving as indices of a score for non-historical data.

10. (original) The method of claim 6 also including providing a user interface for assessing project goals against performance.

11. (previously presented) The method of claim 6 also including providing a user interface for selecting at least one subset of the historical data in addition to a training subset.

12. (previously presented) The method of claim 6 providing a user interface for displaying the performance of the first predictive model for at least two subsets of the historical data for an interval of interest.

13. (previously presented) The method of claim 6 enabling a user to choose interactively at least one transformation or interaction of variables to improve the model development process.

14. (previously presented) The method of claim 6 also includes cross-validating the final model using random portions of the historical data.

15. (previously presented) The method of claim 6 providing a user interface that enables the user to select at least one validation dataset and invoke a process for validating the model development process.

16. (previously presented) The method of claim 6 providing a user interface that enables the user to point and click to cause display of information about the validation of the model development process.

17. (previously presented) The method of claim 16 in which the information about the validation of the model development process includes at least one of: a statistical report card with a link to the statistical report chart, a cumulative lift chart with a link to the cumulative lift chart, and a non-cumulative lift chart with a link to the non-cumulative lift chart.

18. (previously presented) The method of claim 17 in which invocation of the link to the statistical report card causes display of the statistics of the validation of the model development process.

19. (original) The method of claim 17 in which invocation of the link to the cumulative lift chart causes display of a cumulative lift chart.

20. (original) The method of claim 17 in which invocation of the link to the cumulative lift chart causes display of a non-cumulative lift chart.

21 (previously presented) The method of claim 17 in which a user is enabled to choose interactively at least one performance criterion change or transformation or interaction of variables to improve the model development process.

22. (previously presented) The method of claim 6 also including providing a user interface that enables the user to select at least one machine automated model development process applied to the entire set of the historical data for the validated model development process.

23. (previously presented) The method of claim 6 also including providing a user interface that enables the user to point and click to cause display of information about the performance of the validated model development process applied to the entire set of historical data.

24 (previously presented) The method of claim 23 in which the information about the performance of the first model for two independent datasets includes at least one of the following: a statistical report card with a link to the statistical report chart, a cumulative lift chart with a link to the cumulative lift chart, a non-cumulative lift chart with a link to the non-cumulative lift chart.

25. (previously presented) The method of claim 24 in which the invocation of the link to the statistical report card causes display of the statistics of the validation of the model development process.

26. (original) The method of claim 24 in which the invocation of the link to the cumulative lift chart causes display of a cumulative lift chart.

27. (original) The method of claim 24 in which the invocation of the link to the cumulative lift chart causes display of a non-cumulative lift chart.

28. (previously presented) The method of claim 6 also including storing the final model and validation results of the model development process persistently.